

### REMARKS

Responsive to the aforementioned office letter, applicant notes with appreciation the allowance of Claims 1-8, 19-26 and 31 and 32. It was also indicated in the aforementioned office letter that Claims 10, 11, 34 and 35 were only objected to as being dependent upon a rejected base claim. Claim 10 has been presented herein as new Claim 41 and Claim 11 has been presented as new Claim 42. Claim 34 has been presented herein as new Claim 43 and Claim 35 has been presented herein as new Claim 44. It is therefore believed that Claims 41 through 44 are also allowable.

On page 3 of the office action, the Examiner also courteously indicated that Claims 27-30 would also be allowable if amended to overcome any rejection under 35 U.S.C. 112 and presented in independent format. The applicant has added new Claim 45, which is based along Claim 25 and which has been corrected to recite the first fluid control. Consequently, there is sufficient antecedent basis for the subsequently claimed second fluid control. In addition, the applicant has also added new Claims 46-48 which correspond respectively to Claims 28, 29 and 30. It is therefore believed that new Claims 45-48 are also in allowable condition and allowance therefor is respectfully solicited.

Those claims which were rejected under 35 U.S.C. 112 have been amended in order to obviate any informalities noted by the Examiner. It is believed that these claims are free of any objection under 35 U.S.C. 112. The applicant has also amended a few of the other claims similarly in order to avoid any

informalities or inaccuracies previously noted by the applicant. With respect to amendments to the allowed claims, it is to be noted that these amendments are only matters of form and do not change the substance of the claims.

5           The remaining claims, including Claims 9, 12-18, 33 and 36-40 were all rejected as being anticipated by the Credle, Jr. patent. Reconsideration of this rejection is respectfully urged.

          At the very outset, the applicant is quite familiar with the structure shown in the Credle, Jr. patent. The applicant is also  
10       aware that the Credle, Jr. patent was apparently not approved by the FDA of the United States due to the fact that there was no effective sealing between the soda chamber and the syrup chamber. Indeed, it is for this reason that the Coca Cola Company, assignee of the Credle, Jr. patent, sought an additional mixing valve.

15           Notwithstanding the problems with the Credle, Jr. patent, it is also to be noted that the applicant utilizes an entirely different system than that proposed by Credle, Jr. The entire system taught and claimed by the applicant is a liquid operated system and is operated solely from the liquid and syrup which is  
20       introduced through the soda and syrup inlets. Credle, Jr., on the other hand, uses a popit valve control mechanism. In fact, Credle, Jr. must use no less than three popit valves. Moreover, these popit valves are electrically operated and which inherently introduces another safety problem into the system of Credle, Jr.  
25       The applicant's device, on the other hand, presents a far superior system.

Claim 9 of the application has been amended to recite that the control piston is completely liquid driven. Moreover, Claim 9 recites that the control piston is powered through soda from the soda inlet. This is totally unlike anything in Credle, Jr. which  
5 relies upon popit valves to control the syrup section and the soda section. Consequently, it is believed that Claim 9, as amended, patentably distinguishes over Credle, Jr. or any of the other references of record. Claims 10-18 are all dependent upon Claim 9 and are therefore believed to be allowable for the reasons advanced  
10 regarding the allowance of Claim 9.

Claim 33 has also been amended along the lines of Claim 9. In effect, the last subclause of Claim 33 now corresponds almost identically to the last subclause of Claim 9. For the same reasons, it is believed that Claim 33, and Claims 34-40 dependent  
15 thereon, are also believed to be allowable and allowance therefor is respectfully solicited.

The applicant has also added new Claims 49 and 50 patterned respectively along the lines of Claims 9 and 10. These claims more specifically call for the soda drive piston chamber being generally  
20 aligned with but spaced apart from the syrup drive piston chamber, such that there is an air gap between the two chambers. The claims recite that this precludes the possibility of soda entering the syrup drive piston chamber or syrup entering the soda drive piston chamber. This is one of the problems that was present in the  
25 Credle, Jr. patent. It can be observed from Credle, Jr. that the two chambers are abutted against one another, although they are

separate chambers. The problem is that Credle, Jr. relies upon the annular seals as a means to theoretically keep syrup from the soda chamber and soda from the syrup chamber. This has been found to be absolutely ineffective. Indeed, it has been found that the air gap  
5 between the two chambers is absolutely essential.

It has been realized that when the soda is mixed with the syrup a very harmful bacterial culture starts growing in the mixture and is a potential health hazard to anyone who might drink even a small quantity of this mixture. It is for this reason that  
10 the dispensing valve taught in the Credle, Jr. patent is not effective as a mixing valve. The applicant's invention, on the other hand, provides the air gap therebetween and allows for effective operation which is not available with Credle, Jr. It is therefore believed that Claim 49 and the claims dependent thereon  
15 are also allowable.

Claim 52 is also based upon Claim 33 and has been amended to include the same limitations which were included in Claim 49. It is therefore believed that Claim 52 and the dependent Claim 53 therefore also contain allowable subject matter.


20 Claim 54 is again based on the subject matter of Claim 9. This particular claim now recites that the piston control has end positions and that the piston is actually a floating piston so that it is not biased to either of the end positions when in the off state. In contrast, it is to be noted that in Credle, Jr., and  
25 particularly in popit valves, a piston is always biased to one end when in the off position. Thus, it is again urged that Claim 54

therefore patentably distinguishes over the art of record. New  
Claim 55 is based on the subject matter of Claim 33, but also  
includes the limitations added to Claim 54. It is therefore  
believed that new claim 55 is similarly allowable. The applicant  
5 has finally has added Claim 51 which essentially incorporates the  
subject matter of Claim 9, as now amended, as well as new Claim 49  
and new Claim 54. Therefore, for the reasons advanced regarding  
the allowance of each of these claims, it is believed that all of  
these new claims are now in allowable condition and allowance  
10 therefor is respectfully solicited.

In view of the foregoing, favorable reconsideration and  
allowance is respectfully solicited.

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Respectfully submitted,

  
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HAYNES\AMEND.A

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